

Approved Minutes of the Technical Advisory Committee Meeting
October 14, 2003

Members Present: Roger Thompson Allison Lowry
Rodney Pingree Dave Cotton
Gerry Kittle

Others Present: Frank O'Brien Karen Horn

Scheduled Meetings:

November 18, 2003	1-4 PM	Skylight Conference Room
December 9, 2003	1-4 PM	St. Leo's Hall

Review of Agenda:

Dave asked that an item be added about meeting format.

Review of Minutes:

Roger noted that he had incorrectly listed the December 9, 2003 meeting as being at the Methodist Church. The meeting will be held at St. Leo's Hall.

Meeting Format:

David outlined some concerns about the current meeting format and concerns that there had been limited progress for the last several months. He also outlined some suggestions for change. He suggested that the agenda be more detailed and then actually followed during the meeting. One possibility would be to have the first hour devoted to general updates, the second hour devoted to discussions of specific topics, and the third hour focused on making decisions. He envisioned a process where the topic would be noticed in the agenda for an upcoming meeting, it would get discussed at that meeting, and there would be a decision period scheduled for the next meeting. This might help get people to the meeting and might reduce the reopening of decisions that were made at an earlier date. He noted that this would require getting the agenda and the meeting notes distributed early so that people would have time to prepare. This would also provide time for members to exchange e-mail or phone calls prior to the meeting, particularly if they would be unable to attend.

Roger said he would commit to getting minutes and the agenda out early and would support a more organized approach if the committee decided to do this.

This should be discussed at the next meeting.

Rules Status

Roger reported that the meeting that had been scheduled with Anne and Karen Horn had been cancelled because Anne had been out of the office most of the time since the last meeting. Anne is back in the office today and has committed to rescheduling the meeting ASAP.

Karen noted that she is concerned that it has been a long time since the rule revision process started to allow for town delegation and people are anxious to see this completed. Roger noted that the Department had committed \$270,000 to scan all of the existing applications so they can be available for the town delegation process.

Replacement Areas for Improved Lot Subdivisions

The regional office staff and some consultants have asked for guidance on how to apply the improved lot section of the rules, in particular, how to decide when “any fully complying area off the lot is so remote or inaccessible that it would be clearly unreasonable to require its use”.

Draft #2, dated 9-16-2003, which was also reviewed at the previous meeting, was further discussed. The question of what is required for a best fix system, and in particular whether construction of a smaller system based on current use of the residence should be allowed was considered. The plus would be that the current owner could build a less expensive system if the current use is significantly less than the grandfathered capacity for the building. The negative is that compliance is a bigger issue and when the ownership changes the new purchaser would have to replace or expand the system even if it is only a year or two old if the new use is more than the current use. There was no consensus on this. Gerry said he thought it was better to build the full size system than to try to enforce the requirements later.

No one had strong feelings about the 1500’ horizontal limit or 150’ vertical limit that would serve as the outermost limits of the search area for a replacement system, as long as a functioning system could be designed.

Opportunities for Drip Disposal

Roger said that the Department wanted to prepare a draft proposal that would use drip disposal on sites with little depth to SHWT that require very low loading rates to maintain the 6” of unsaturated naturally occurring soil. The approach would include the concept Rodney had floated of replacing the vertical separation required between the bottom of the disposal field and the SHWT with a time of travel that would protect water supplies. The time of travel would have to be at least 2 years, the zone that provided this protection would have to be owned or controlled by the permittee so that neighbors did not have their property encumbered without their agreement. We also discussed the fact

that the amount of soil that would provide a two year time of travel might not have storage capacity for two year's of flow.

Dave asked if treatment should be required. If the proposal would allow the bottom of the disposal field to be at or in the SHWT there would be little treatment of the effluent. Rodney noted that people would be protected by keeping the effluent at least 6" below grade and by protecting the water source with the time of travel. Dave also noted that drip disposal would not be the only method that might be compatible with the concept of trading vertical separation for time of travel.

Information needed:

- A. What are the limits on soil types? Must it be silt or clay? How thick must the layer be above bedrock or an unconsolidated aquifer?
- B. How deep do the emitters need to be for Vermont's climate?
- C. Can the base of the system be at or in the SHWT?
- D. A hydro chart similar to the one for linear loading rate should be developed, if possible, that would relate slopes and soil type to the horizontal distance required for two-year time of travel. Will need to account for the most permeable soil layer so travel might be further than expected.
- E. Should pretreatment be required? Would there be any trade off on number of emitters or maintenance issues?
- F. What are other states doing when using septic tank effluent with drip disposal and what do they use for vertical separation to the SHWT?

Innovative Systems –

Frank said that a general use approval was ready to be signed for the Bord Na Mona peat based system and for the Bioclere system.

Frank reviewed his visit to Dave Presby's factory. He is still reviewing the information submitted by Mr. Presby related to two testing programs of the EnviroSeptic Pipe.

The Infiltrator application remains under review.

Gerry noted that one contractor reported problems with both leaching chambers and EnviroSeptic but there were no details about the cause of failure.

Gerry also asked about the Fast System. Frank indicated that the system is under review. Gerry said that in situ testing of one system in Colchester was giving readings of up to 80 mg/l for BOD, exceeding the standard of 30 mg/l.

Frank noted that the Living Machine system that had been originally permitted for the now closed Guilford rest area was being relocated to the Sharon northbound rest area and an application is under review. It will be used when the new rest area is opened in a year or so. The system will continue to recycle treated wastewater for toilet flushing, with the excess water disposed of in a new disposal field located some distance away in the median.

A proposal for use of a bottomless sand filter as a filtrate disposal system is also under review. A pilot study has been proposed based on replacing an existing failed system.